ILLUSTRATION 5-1

CARGO TANK FACILITY WORKSHEETS

A. Cargo Tank Manufacturer Facility Worksheet

The preparation of the cargo tank manufacturer worksheet shall be done as follows:

(1) General

Specific information to be gathered during the examination. A copy of this form may be given to the company official. The original shall be maintained in the FMCSA file for this facility. A copy shall **not** be forwarded to the SD or to the Service Center.

(2) Field 1 - DOT Registration Number

Enter the registration number assigned to the facility.

(3) Field 2 - Name of Manufacturer Facility

Enter the correct name of the legal entity. In the case of a corporation, obtain the exact legal name from a responsible official, State records, ect. Do not list surname first.

In the case of individuals or corporations who are doing business under a "trade name" enter the trade name first and after it enter the name of the individual or corporation. For example, if John Jones is doing business as "JJ Testing", enter this in the space provided as "JJ Testing"(John Jones dba).

If possible enter the name on a single line. Do not print one line on top of the other.

(4) Field 3 - Effective Date of DOT Registration

This date will be obtained from the registration letter received from DOT.

(5) Field 4 - Date of ASME Certification

The manufacture facility must have a copy of their certification from the American Society of Mechanical Engineers (ASME). This must be a "U" Stamp certification. Enter the date of this

certification.

(6) Fields 5-8

Identify the names of the person(s) designated by the company as the Director of Operations, Design Certifying Engineer, Quality Control Manager, and the Registered Inspector.

(7) Field 9 - Person Responsible For

Enter the name of the person in the facility who verifies each of the items (a) through (e). In (f) record the name of the authorized inspector if applicable. Every manufacturer of pressure containers which are designed and constructed according to ASME code specifications will have on their staff an independent inspector (who may represent an insurance company). This inspector is ultimately responsible for all phases of construction and repair of these containers. Include the name(s) of the inspector and the employer, and the employer's address and telephone number.

In (g), enter the name and address of the laboratory which performs the sets for the company's welders, welding procedure, and tensile strength.

(8) Field 10 - Description of Operations

This information is very important because it condenses future research needed to assess the company's level of compliance during the assembly line or plant inspection. e.g., if a manufacturer discloses to the investigator that only DOT 406 cargo tanks are constructed and the only materials used are aluminum alloys (AL), then the investigator in referring to 178.345 and 178.346 can focus on all requirements exclusively pertaining to aluminum constructed DOT 406 cargo tanks. A simple check-off format is provided in this field to record the company's operation.

(a) Operations

Mark the block which describes the function(s) this facility primarily performs.

(b) Tanks Manufactured

(i) If a company fabricates containers under a DOT exemption, they must maintain a current copy of the exemption at the facility. Records of their exemption are located at Washington Headquarters. Refer to 49 CFR 107.103 and Appendices A and B to Part 107 for additional information and marking requirements.

(ii) If a company fabricates portable tanks, refer to 49 CFR Parts 173.32, 178.245 through 178.255, and 178.270 through 178.315. Special containers constructed for the transportation of liquid nitroglycerin (MC 200 and 201) are referred to in 49 CFR Parts 178.315 and 178.318.

(c) Metals Used

Self-explanatory

(d) Guidelines Followed

List any and all mandatory and non-mandatory guidelines the facility observes.

(e) Vehicle Configurations

Self-explanatory

(9) Field 11 - Name of Vendors Supplying the Following Components

Identify the main supplier of each of the listed components for future regulatory review. Also if the manufacturer fabricates any of these items in-house, a determination as to how it meets DOT or ASME specifications should be made. If a company uses duplicate vendors, enter the phrase "Same as b." or "Same as f." as it applies

(10) Field 12 - Company Records

Before inquiring about the company's records, it is suggested that the investigator determine if a cargo tank is currently under construction, the type, and materials used. Ask to see the design specifications (blue prints) and job traveler sheets of that tank and

incorporate the questions regarding company records to that tanks.

The manufacturer maintains a record of all work done on each tank manufactured. It may be filed by customer name, job No., or National Board No.

Identify if the records listed are being maintained and how they are filed.

(11) Field 13 - Additional Required Records

Identify if these records are being maintained as required.

(12) Field 14 - Inspection Checklist for MC 306, 307, and 312 Tanks

The general design and construction requirements applicable to specification MC 306, 307, and 312 cargo tanks are listed for easy reference. Use them to make your inspection of the company's fabrication procedures. Place "N" in the box right of the requirement if any violations are discovered. If the cargo tank is only partially constructed when inspected, all those requirements up to the point of construction must be checked. For sections which do not apply, place a "N/A" in the appropriate space.

(13) Field 15 - Inspection Checklist for MC 331 and 338 Tanks

The general design and construction requirements applicable to specification MC 331 and 338 cargo tanks are listed for easy reference. Follow the same procedures outlined in Field 14.

Note the additional HMR requirements for tanks constructed to transport chlorine or ammonia.

(14) Field 16 - Inspection Checklist for DOT 406, 407, and 412 Tanks

The general design and construction requirements applicable to specification DOT 406, 407, and 412 cargo tanks are listed for easy reference. Use them to make your inspection of the company's fabrication procedures. Follow the same approach outlined in Field 14.

(15) Field 17 - In-progress Quality Control Verification

As part of the plant inspection of the construction of cargo tanks, be sure to check the following:

(a) Material accounting number against work order.

Are the materials listed in the specification requirements (blue prints) the same as those recorded on the job order.

(b) Welding procedure specification number against work order.

Identity of welder is stamped on each 3 feet or less of welding performed or other record kept to positively identify who performed weldments.

(c) Job traveler sheet - quality control procedure.

A checklist with provisions for examiner's signature or initials and date showing who made inspection and when it was made.

(d) Does Quality Control Manager Report to Management?

Self-explanatory.

(16) Field 18 - Remarks and Recommendations

Record here any pertinent information not included in the regular inspection format. Use this part to explain "other" notations, or to further qualify certain answers.

The dialogue developed between investigator and manufacturer is extremely important. The exchange of information will help both parties understand special problems and to clarify conflicting regulations.

(17) Field 19 and 20

Self-explanatory

B. Cargo Tank Repair Facility Worksheet

(1) Specific information to gathered during the examination. A copy of this form may be given to the company official. the original shall be maintained in the FMCSA file for this facility. A copy shall **not** be forwarded to the SD or to the Service Center.

(2) Field 1 - Name of Repair Facility

Enter the correct name of the legal entity. In the case of a corporation, obtain the exact legal name from a responsible official, State records, ect. Do not list surname first.

In the case of individuals or corporations who are doing business under a "trade name" enter the trade name first and after it enter the name of the individual or corporation. For example, if John Jones is doing business as "JJ Testing", enter this in the space provided as "JJ Testing"(John Jones dba).

If possible enter the name on a single line. Do not print one line on top of the other.

(3) Field 2 - General Information

Enter the DOT Registration Number, Date of Registration, and ASME/National Board Certification No. Circle the type of stamp(s) held by the facility (R Stamp or U Stamp). Enter the approximate number of tanks repaired during the past 12 months.

Enter the name(s) of the registered inspectors, authorized inspector(s) and their agencies, and design certifying engineer(s) used by the facility.

(4) Field 3 - Types of Tanks Repaired

Check any and all types of tanks the facility has repaired in the past 12 months.

(5) Field 4 - Nature and Extent of Repairs

Give a brief summary of the types of general repairs handled. If the facility is involved in general repairs complete the Cargo Tank Inspection/Testing Worksheet found in Part C of this appendix.

Give a brief summary of any stretching or rebarreling repairs done. If the facility is involved in stretching or rebarreling repairs, fill out the Manufacture's Worksheet found in Part A of this appendix.

C. Cargo Tank Inspection/Testing Worksheet

(1) Specific Information to be gathered during the examination. A copy of this form may be given to the company official. The original shall be maintained in the FMCSA file for this facility. A copy shall **not** be

forwarded to the SD or to the Service Center.

(2) Field 1 - Facility Being Reviewed

Enter the correct name of the legal entity. In the case of a corporation, obtain the exact legal name from a responsible official, State records, etc. Do not list surname first.

In the case of individuals or corporations who are doing business under a "trade name" enter the trade name first and after it enter the name of the individual or corporation. For example, if John Jones is doing business as "JJ Testing", enter this in the space provided as "JJ Testing"(John Jones dba).

If possible enter the name on a single line. Do not print one line on top of the other.

(3) Field 2 & 3 - Registration Number and Date

Enter the DOT Registration Number that was issued by RSPA proceeded by CT as well as the date of registration.

(4) Field 4 - Name/Title of Individual Supplying Information

Record the name and title of any and all individuals supplying the information for this review.

(5) Field 5 - Registration Information

Examine the registration information and Circle the appropriate answer as to the letters being on file. Examine the information submitted for accuracy to determine if the information is current.

(6) Field 6 - Inspectors and Testers

List the names of all inspectors or testers the facility uses to conduct tests or inspections. Examine employment records of individuals identified, using sample guidelines shown under section 2(a) of this chapter, to ensure the individuals identified are employees of the registered facility for the time period they have signed inspection/test reports, and that these individuals are qualified to do the inspection/tests they performed.

(7) Field 7 - Inspections/Tests Registered to Perform

Examine the registration information to determine the types of

inspections and tests the facility stated they were going to conduct. Check the appropriate tests/inspections identified on the registration information.

Caution: Because a facility has registered to conduct all types of tests or inspection, does not require they actually conducting all types of the tests/inspections. Early registrations were accepted that did not include the specific types of tests/inspections to be conducted.

(8) Field 8 - Types of Inspections/Tests Actually Performed

Request the individual supplying information determine the approximate number of each type of test/inspection performed during the last 365 days. Record that approximate number of each type of test/inspection conducted by the facility.

When examining actual inspection/test records ensure the types of inspections/tests actually done have been identified for this field.

(9) Field 9 - Inspector/Tester Qualifications

Examine the facilities reference materials to determine there is adequate information available to the inspector/tester to ensure he is properly informed to the requirements of the regulations for the work the facility actually performs. This may be in the form of 49 CFR, a company policy manual, or other industry guidance manuals.

Request the individual providing information explain the qualifications of the inspectors/testers reviewed in field 6. Documentation of this training and or experience is not required to be on file.

(10) Field 10 - Inspection/Test Report Content

Examine at least one inspection/test report for each type of test the facility actually performed. Record the number of reports examined in the column titled "CHKD" and the number of missing entries for each item in the column titled "DISC". Explain all missing entries in the deficiencies section of Field 11. Attach a copy of each report examined which is deficient.

CAUTION: Facilities that are not the owner of the cargo tank or the motor carrier operating the cargo tank are not required to maintain copies of the individual inspection/test reports. Effort should be made to attain copies of the reports from the motor carrier if the

facility does not maintain copies of the individual inspection/test reports.

(11) Field 11 - Inspection/Test Report Examinations

Record the number of inspection/test reports examined. Explain all deficiencies discovered for each type of inspection report examined. Indicate the severity of the violations discovered. (EXAMPLE: one of four external visual reports examined fails to indicate the manufacturer's serial number.)

(12) Field 12 - Appropriate Test/Inspection Tools or Equipment

Determine if the facility has the appropriate equipment or tools to perform the types of inspections/tests actually performed. (EXAMPLE: Facility is given a NO if they conduct thickness tests but do not have a thickness testing device and the ability to calibrate the equipment.